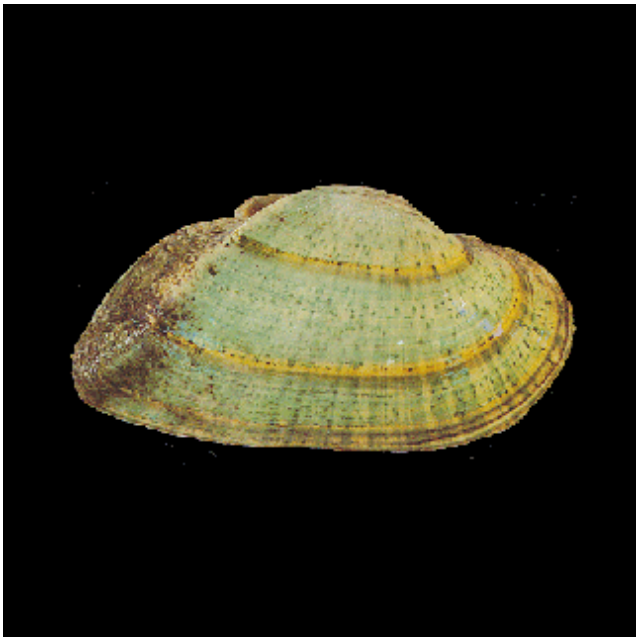

elktoe

Alasmidonta marginata

Kingdom:	Animalia
Division/Phylum:	Mollusca
Class:	Bivalvia

Features

The shell of the elktoe mussel is relatively thin, elongate, triangular, and “inflated.” The anterior end is rounded, but the posterior is sharply angled, ending in a blunt, square point. There is a prominent, sharply angled posterior ridge. The posterior portion of the shell is covered with fine ridges. The umbo (hump near the hinge) is large and located near the center of the shell. The ventral margin is straight to slightly curved. The outside of the shell is yellowish green or bright green with numerous rays and dark green spots. The posterior often is lighter than the rest of the shell. The inside of the shell is bluish white, occasionally with salmon near the underside of the umbo. Elktoe mussels may grow up to four inches long. The common name comes from the appearance of the mussel in the bottom substrate.

Natural History

Elktoe mussels are found in medium-sized streams in gravel or mixed sand and gravel, e.g., riffles. It formerly was found in the Mississippi, but there are no records in recent decades. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Host fish for this mussel species include several widespread but rare stream fish. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

interior rivers and streams

Iowa Status

uncommon; native

Iowa Range

northeastern three-fourths of Iowa

Bibliography

Iowa Department of Natural Resources. 2001. *Biodiversity of Iowa: Aquatic Habitats* CD-ROM.